

**Ultrafast Rectifier**

**MUR860**

**FEATURES**

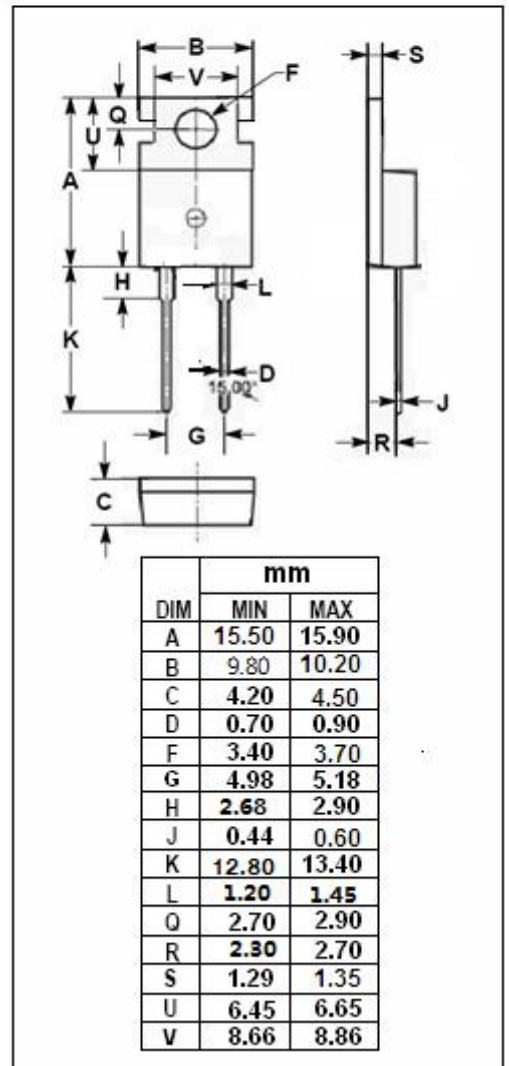
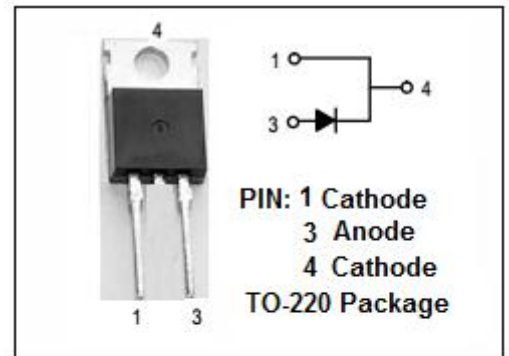
- Ultrafast with soft recovery
- Operating temperature
- Reverse voltage
- Avalanche energy rated
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- Power switching circuits
- General purpose

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RFWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	8	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	100	A
P <sub>D</sub>	Maximum power dissipation	75	W
T <sub>J</sub>	Junction Temperature	-55~175	°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	°C



**Fast Recovery Rectifier****MUR860****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th,j-c}$	Thermal Resistance, Junction to Case	2.0	°C/W

**ELECTRICAL CHARACTERISTICS**( $T_a=25^{\circ}\text{C}$ ) (Pulse Test: Pulse Width=300  $\mu$ s, Duty Cycle $\leq$ 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_{F^*}$	Maximum Instantaneous Forward Voltage	$I_F=8\text{A}; T_j=25^{\circ}\text{C}$ $I_F=8\text{A}; T_j=150^{\circ}\text{C}$	1.5 1.2	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R=V_{RWM}; T_j=150^{\circ}\text{C}$ $V_R=V_{RWM}$	500 100	$\mu$ A
$t_{rr}$	Maximum Reverse Recovery Time	$I_F=1\text{A}; di/dt=200\text{A}/\mu\text{s}$ $I_F=8\text{A}; di/dt=200\text{A}/\mu\text{s}$	60 70	ns

\*:Pulse test ,Pulse width=300us,duty cycle $\leq$ 2%

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